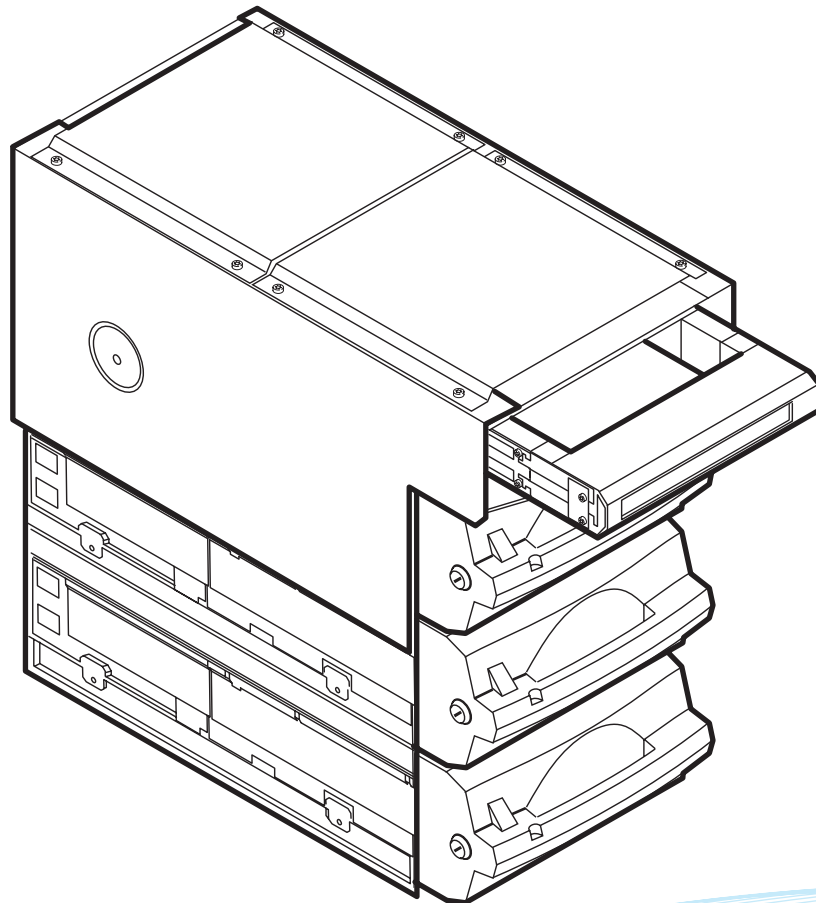


# NMD 100

## Users Guide



D010920

## **Preface**

Notes and Media Dispenser, NMD, is a product made by Talaris Cash Dispensing AB.

This user handling covers instructions and information necessary for handling the NMD 100 in the correct way.

Talaris Cash Dispensing AB  
Flen, Sweden

This is the User Handling description for the NMD 100. The intention is that this manual will be included in a complete User Handling Manual.

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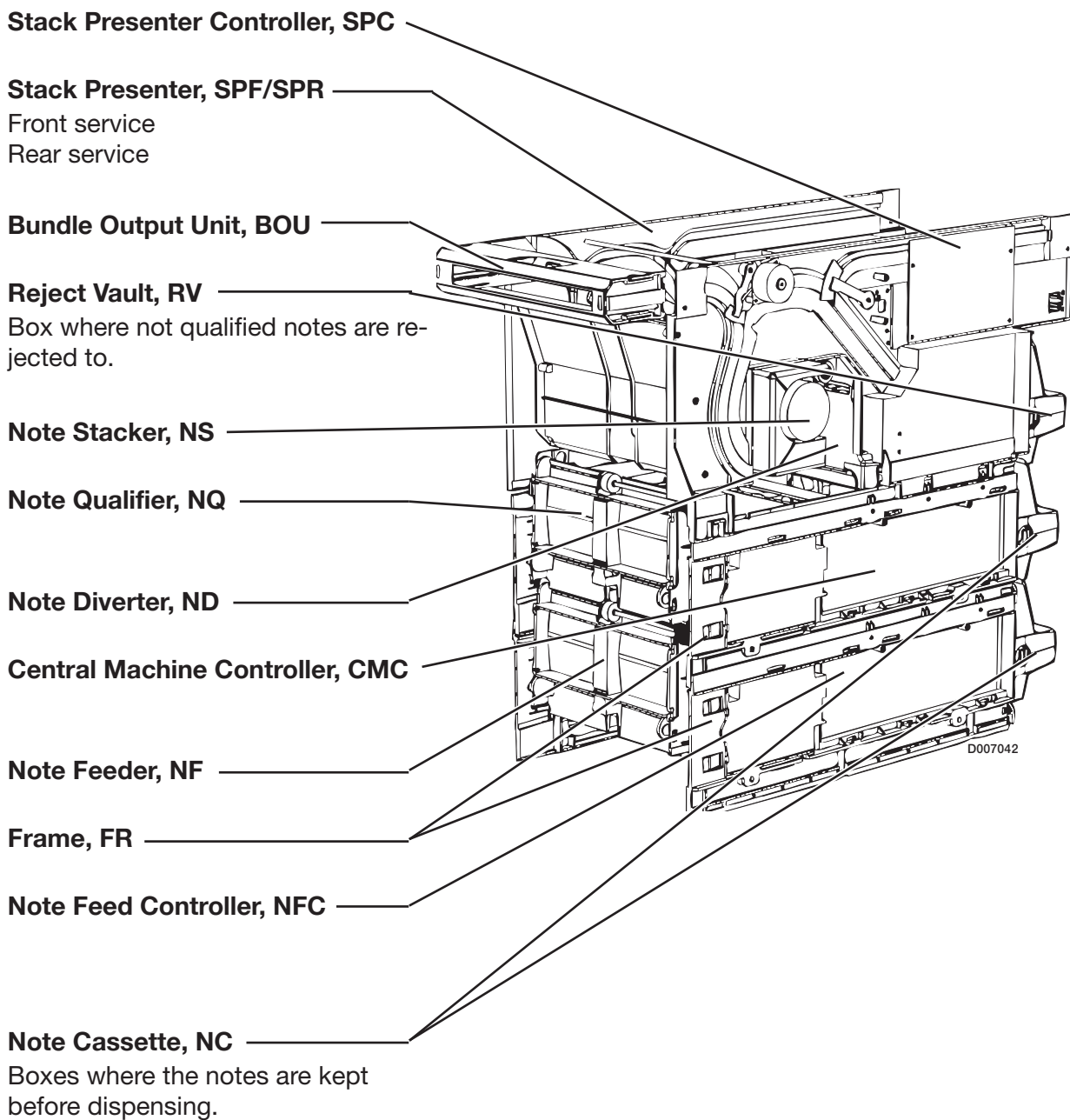
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### Notes and Media Dispenser (NMD)

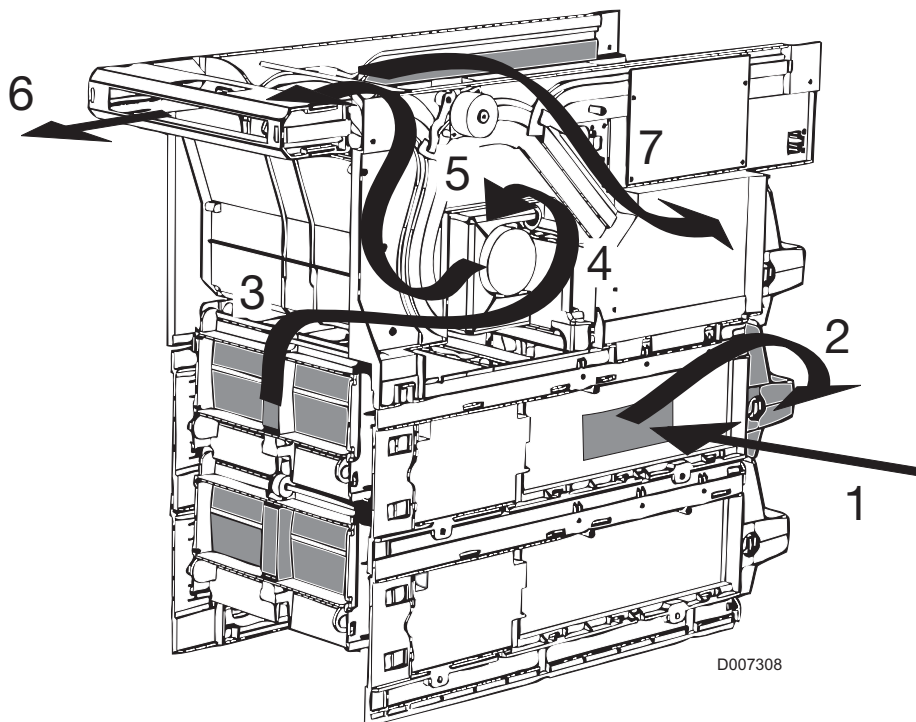
NMD 100 is a note handling machine in a modular system.

The NMD 100 consists of the following main parts:



# introduction

## Function



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### 1 Message to the NMD

A request to dispense is made. The request is transmitted as a message to the Central Machine Controller in the NMD. The message describes the number of notes to be dispensed.

### 2 Message to the Note Feed Controller

With this message the Central Machine Controller requests the number of notes to be delivered from each Note Cassette.

### 3 Notes up from the cassettes

The selected Note Feeders count the required number of notes for each denomination and feed them to the Note Qualifier Unit.

### 4 Note Qualifier Unit

The Note Qualifier Unit feeds the notes into the Note Diverter. Any incorrect note will be rejected into the Reject Vault.

### 5 Notes counts and collects

The notes are counted a second time and checked for incorrect note feedings when they are passed into the stacker area. The notes are stacked in the Stack Presenter Bundle Carriage Unit.

### 6 Delivery of notes

When the tests indicate no error, and the ordered number of notes has arrived, the Bundle Carriage Unit delivers the note bundle to the Bundle Output Unit.

If any test indicates an error, the bundle of notes will be transported to the Reject Vault.

### 7 Reject of bundle not taken

If the bundle is not taken, The bundle of notes will be transported to the Reject Vault.

# loading and unloading notes

## preparing notes

To ensure the performance of the machine, all personell involved in the loading must be trained in **note preparing and loading procedure**.

The number of rejects depends directly on the loading procedure and the quality of the notes.

Store the notes at room temperature for at least eight hours before feeding from cassettes.

The following procedures are recommended to aid easier note feeding from cassettes.

**Without preparation, feeding problems may occur, such as higher reject rate or jam in the transport path.**

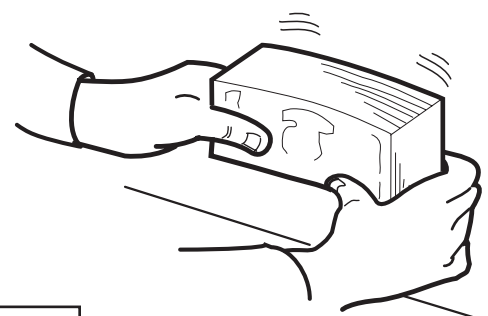
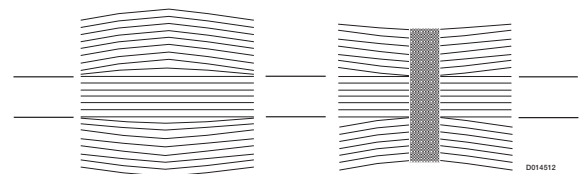
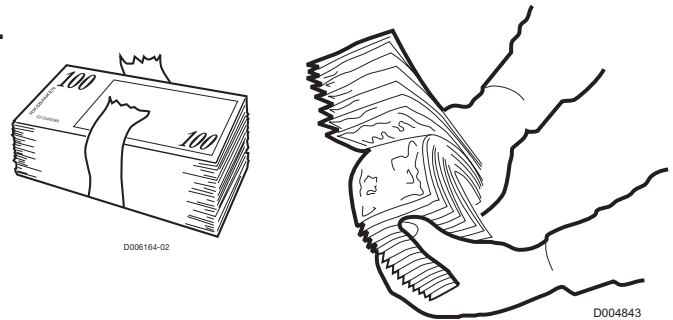
An alternative method to hand sorting ATM fit notes can be used. ATM fit notes are defined as better than level 8 as defined in the 3700 Sorter.

### New, unused notes

- Remove the band around each bundle of notes.
- Separate the notes from each other by:
  - **Striking** the bundle hard against the edge of a table or similar object.
  - **Flipping** through each bundle of notes in both directions at both ends.
- **Using a note counter.**

Select notes from the center of the bundle. The notes in the center are normally flat, notes in the ends of the bundle are often cupped.

- Align the edges of the notes in both planes by holding a bundle loosely between the fingers and thumbs of both hands and tapping lightly on a flat surface then tapping the note ends.

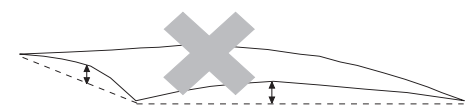
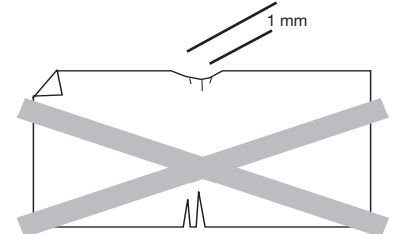


### Unacceptable Notes

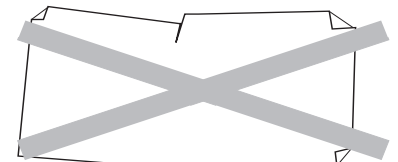
- Joined by any means
- Having staples or pins
- Sticky surfaces
- Repaired with tape
- Torn, with tears exceeding 5 mm, or with center edge tears.
- Bent or folded more than 1 mm in center.
- Having holes or missing sections
- Crumpled or crisp and crinckled
- Dog-eared, with a folded edge exceeding 5 mm
- Limp or moist
- Concave or deformed by prolonged storage
- Having strapping damage
- Combination of new and used notes in the same cassette may cause higher reject rates

**Notes with these irregularities are liable to cause feeding problems**

**Dog-eared, strapping damage**



**Concave notes 5 mm or more**



**Crumpled notes**

### Used notes

- Remove the band around each bundle of notes.
- Remove foreign objects, e.g. pins, paper clips, crumbs etc.
- Remove torn or very worn notes.
- Straighten any folded notes.

**Used Notes must not be limped and should be reasonably clean.**

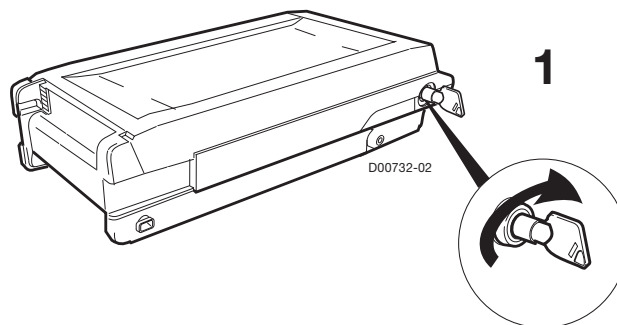


# loading and unloading notes

## open Note Cassettes

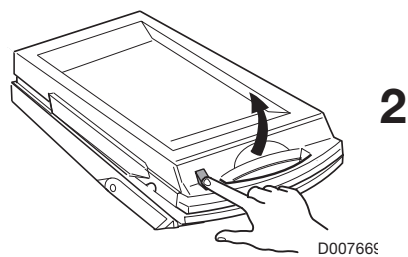
### 1 Unlock the cassette

Press the key while turning it clockwise to stop.



### 2 Open the cassette

Open the cassette by pressing the green button to the left and lifting the lid up to full open position.



# loading and unloading notes

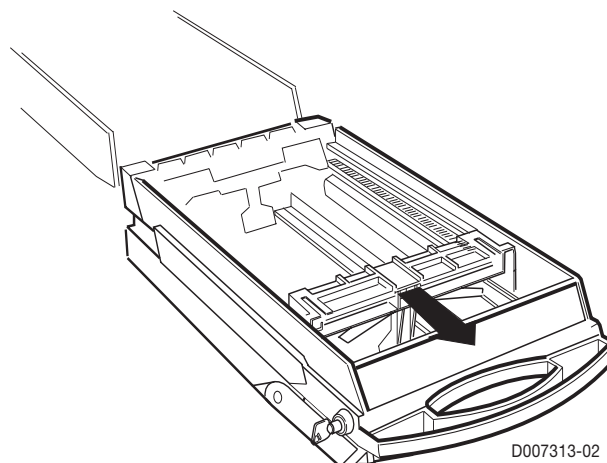
## note loading

Check the notes are of correct denomination into the cassettes.

### 1 Move the pusher plate

The pusher plate has to be moved to give space for the notes between the pusher plate and the feed opening.

Move the pusher plate towards the cassette handle.



# loading and unloading notes

## note loading

### 2 Load the prepared notes

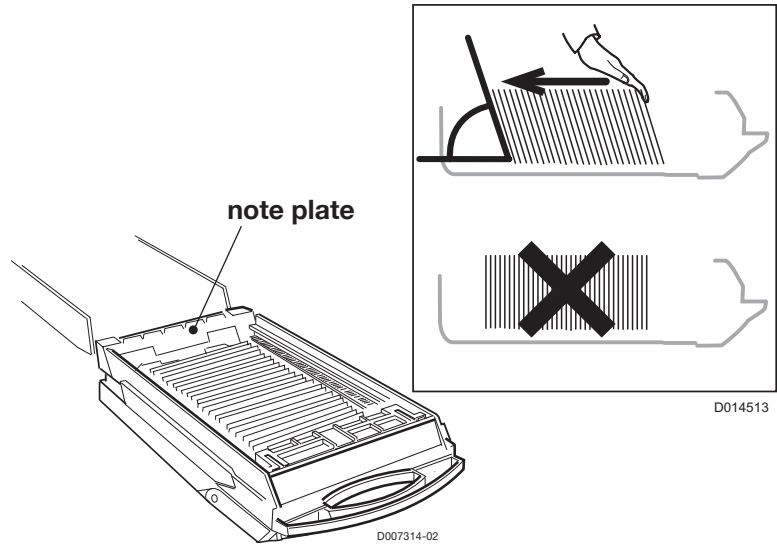
The Note Cassette could be loaded with a note-pile of approximately 340 mm (which contains approximately 2600 used or 2900 new notes).

The note-pile must lean evenly against the note plate.

#### Warning!

Notes are sometimes thicker in certain parts. They can also be cupped in the bundle.

If the notes are turned the same way, the pile will be unequal and the notes will be difficult to dispense.

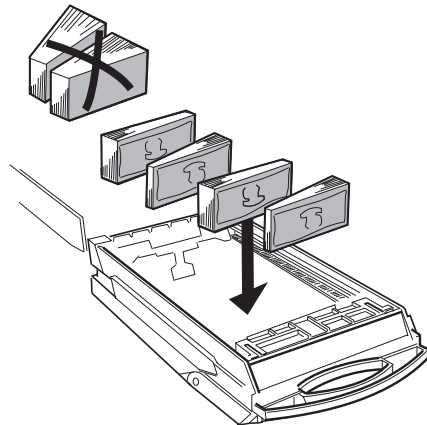


### Slanting pile

- To avoid feeding problems caused by a slanting pile, put the notes in neat bundles of 100-200 notes.
- Turn every other bundle to face the other way to make the pile the same height at all sides.

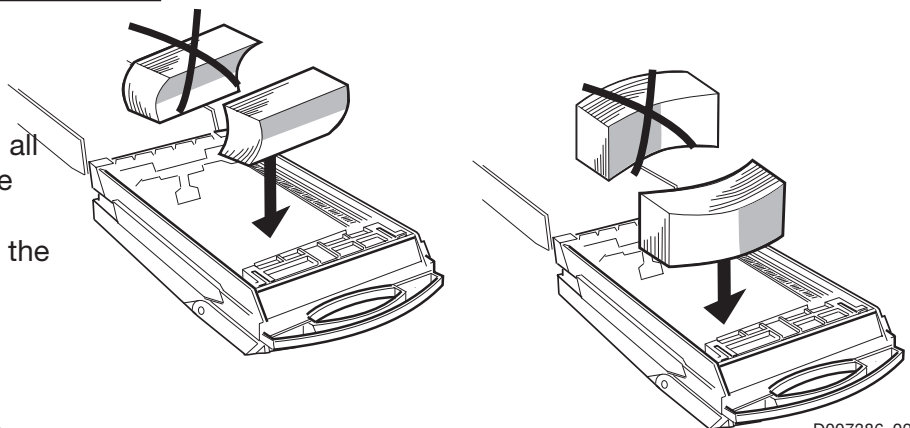
#### Note:

When loading the cassette alternate packs/bundles of 100 notes as shown, and make sure that any bowed notes are loaded with the bow towards the pusher plate.



### Concave bundle

- To avoid feeding problems caused by concave bundles, turn all the bundles with the concave side towards the feed opening. It will make feeding of notes from the cassette easier.



### Common notes

- Place the prepared bundles in the cassette.

# loading and unloading notes

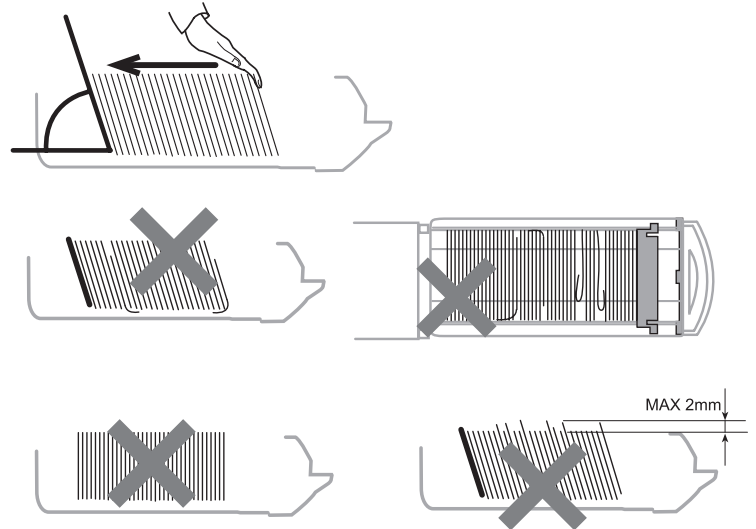
## note loading

### 3 Level the note pile

Compress the note pile slightly by hand. Single notes must not protrude upwards more than 2mm from the bundle.

Make sure that the notes are not bended sideways against the note support.

Make sure the bundle leans evenly against the note plate.

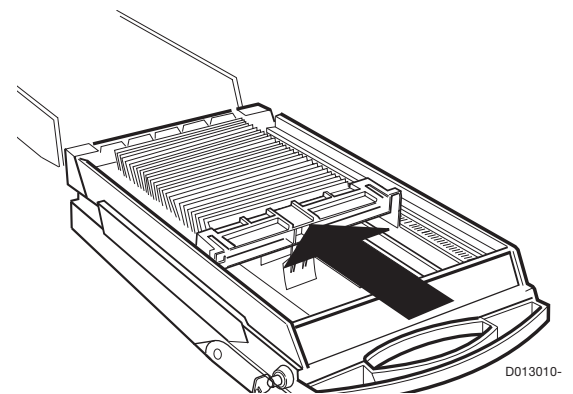


D007316-02

### 4 Move the pusher plate

Move the pusher plate towards the notes, close enough to hold the notes in correct position, do not force.

Do not overload and check that a free space of minimum 10mm exists between the pusher plate and the green locking plate.



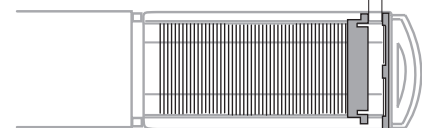
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10mm

### 5 Close the cassette

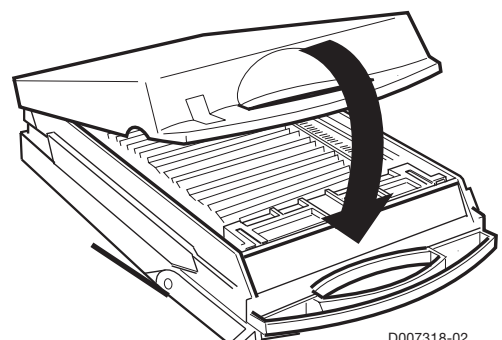
Fold down the cassette lid and press it distinctly, on the green dot, to properly closed position at both ends.

Check that the green button is in its most right position.



### 6 Lock the cassette

Lock the cassette with the key.



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# loading and unloading notes

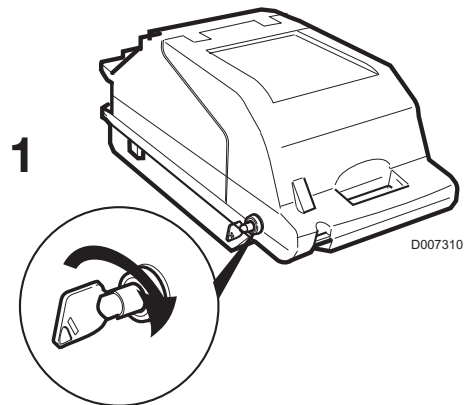
## emptying the Reject Vault

The Reject Vault can contain up to 300 notes or less depending on the mix between bundle/single reject.

### Open the Reject Vault

#### 1 Unlock the vault

Press the key while turning it clockwise to stop.



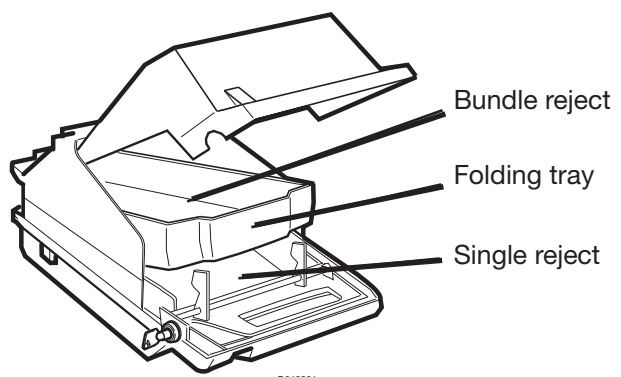
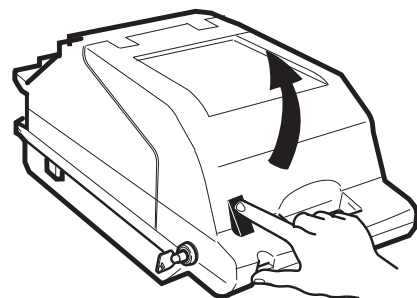
#### 2 Open the vault

Open the vault by simultaneously pressing the green button and lifting the lid up to full open position.

The vault is now open for collecting the retracted note bundles.

Make sure that the compartment for single reject also is cleaned.

Lift the folding tray inside the vault to collect the single rejects.



### Close the Reject Vault

#### 3 Close the lid

Close the folding tray before closing the lid of the reject vault.

Fold down the cassette lid and press it carefully to properly closed position at both ends.

Lock the vault with the key.

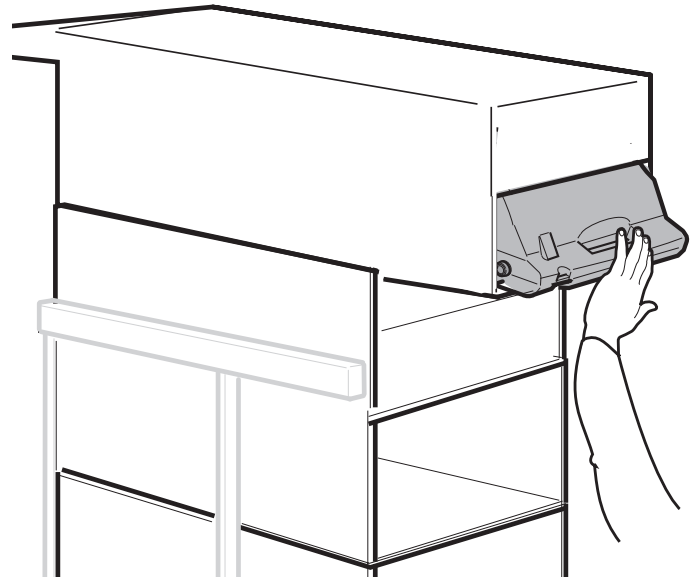
## inserting Reject Vault

### Insert the vault

Using the handle and supporting the vault underneath, slide the vault straight into the machine.

Make sure the vault is fully inserted.

The vault is now ready to be locked in position and opened, using appropriate command from host, driver or application.



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# opening

## inserting Note Cassettes

The note cassettes can be inserted in any order and position.

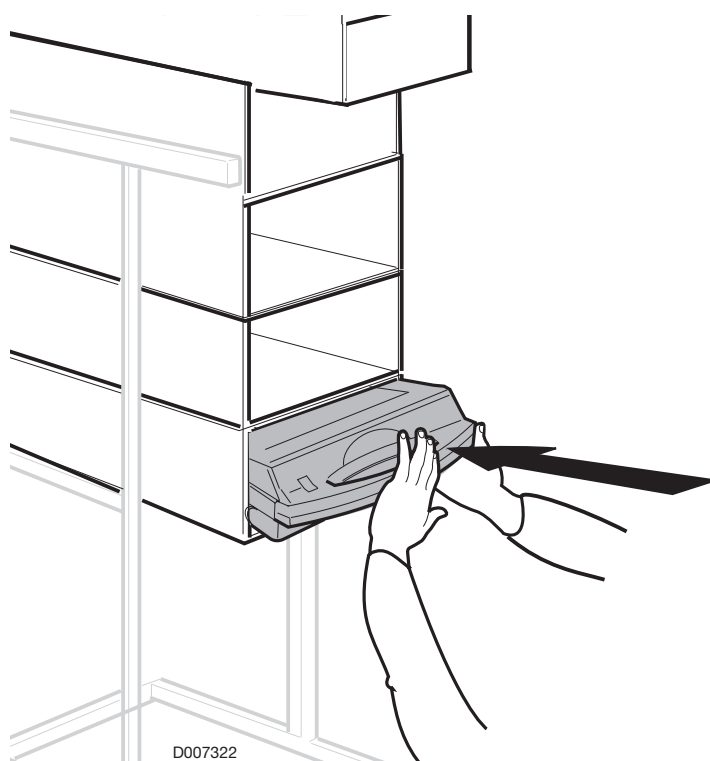
Each cassette informs the NMD of position and denomination.

### Insert the cassettes

Using the handle and supporting the cassette underneath, slide the cassette straight into the machine.

Make sure the cassette is fully inserted.

The cassettes are now ready to be locked in position and opened, using appropriate command from host, driver or application.



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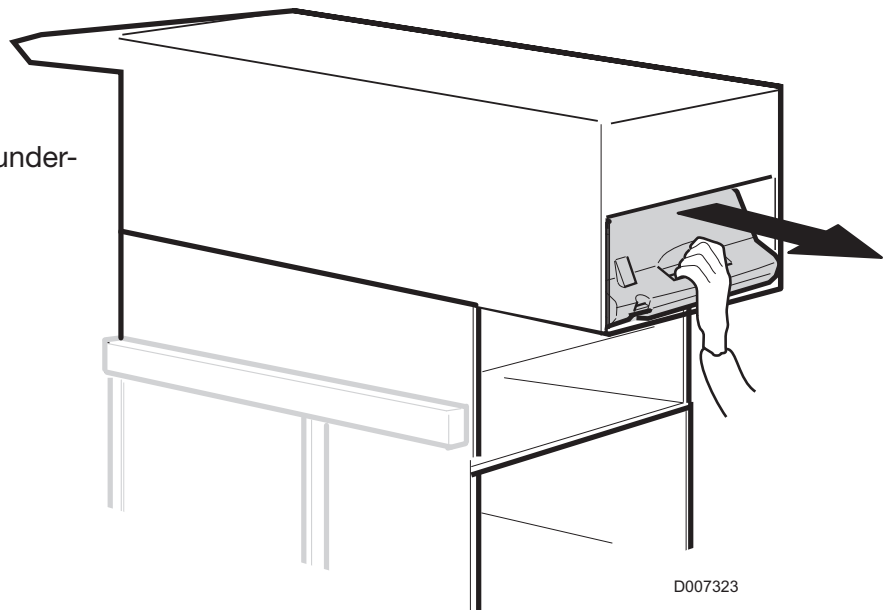
## removing Reject Vault

To empty rejected transactions the reject vault must be removed from the NMD.

Before removing the vault it must be closed and released from its locked position, using appropriate command from host, driver or application.

### **Remove the vault**

Use the handle and support the vault underneath. Slide the vault straight out.





# closing

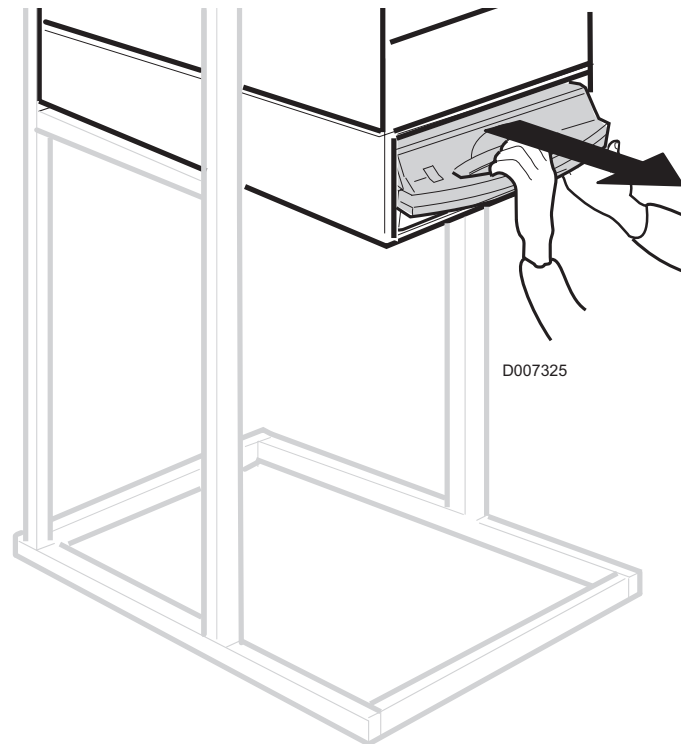
## removing Note Cassettes

The cassettes can be removed in any order. All cassettes do not have to be released and closed to remove one cassette.

Before removing the cassette it must be closed and released from its locked position, using appropriate command from host, driver or application.

### **Remove the cassette**

Use the handle and support the cassette underneath. Slide the cassette straight out.

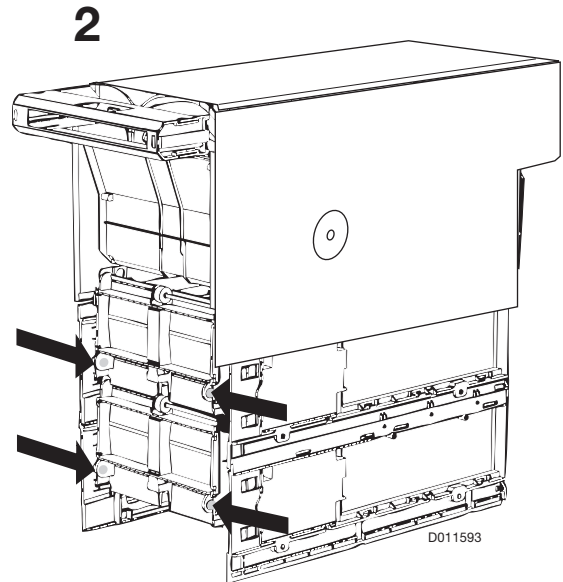


- 1 Remove Note Cassettes and Reject Vault.  
See page 15-16

### Important!

Always switch the **power off** before clearing jams.

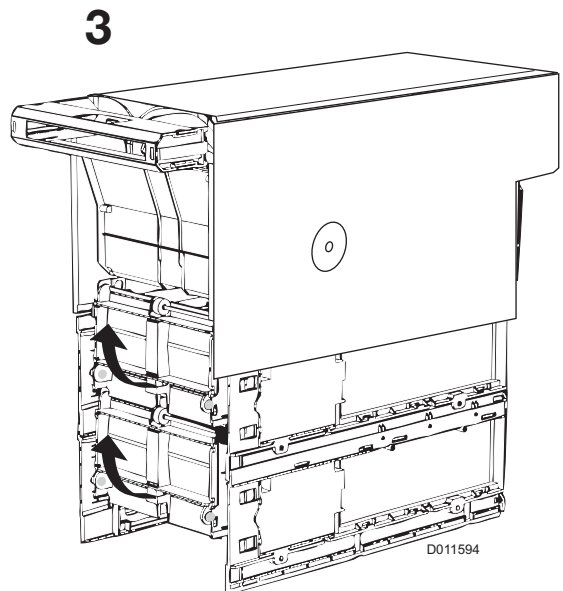
- 2 Press the yellow snap fits to release the lids.



- 3 Fold the lids up and clear the note path from notes.

- 4 Any notes removed from the mechanism must be handled according to local procedures.

- 5 Close the lids carefully.



**If the trouble still remains, call for an NMD service engineer.**

# troubleshooting

## jam in Stack Presenter or Bundle Carriage Unit

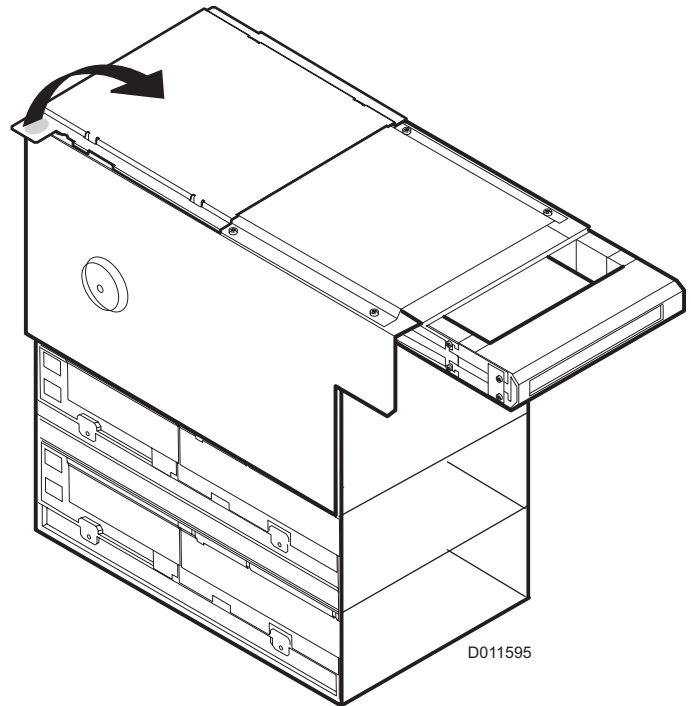
- 1 Remove Note Cassettes and Reject Vault.  
See page 15-16

### Important!

Always switch the **power off** before clearing jams.

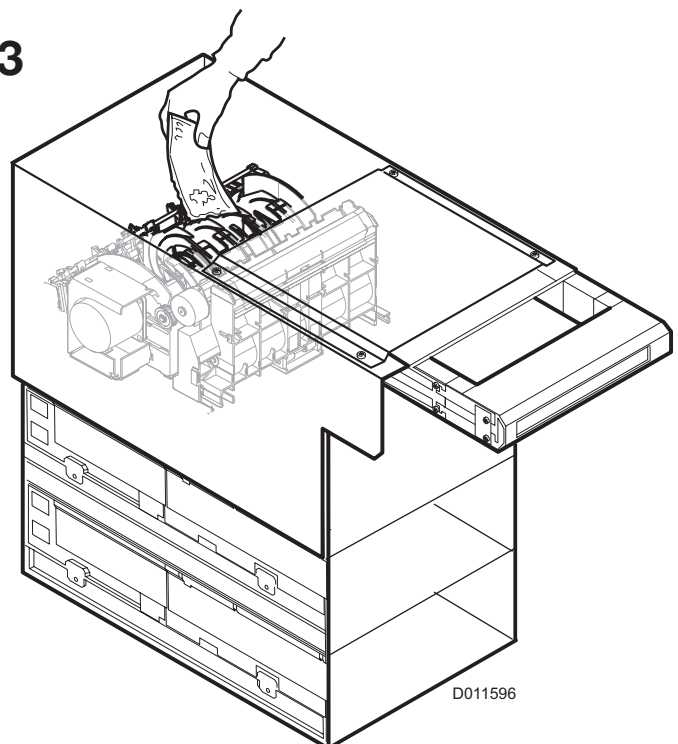
- 2 Open the top lid of the NMD.

2



- 3 Remove all jammed notes. Be careful not to damage the stacker wheel.

3



- 4 Any notes removed from the mechanism must be handled according to local procedures.

- 5 Close the top lid carefully.

If the trouble still remains, call for an NMD service engineer.

## jam in Note Qualifier

- 1 Remove Note Cassettes and Reject Vault.  
See page 15-16

### Important!

Always switch the **power off** before clearing jams.

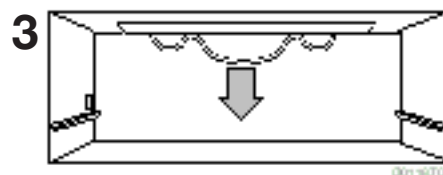
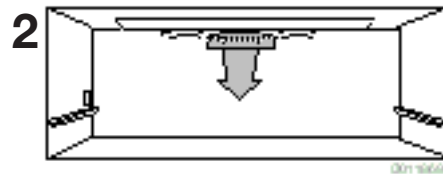
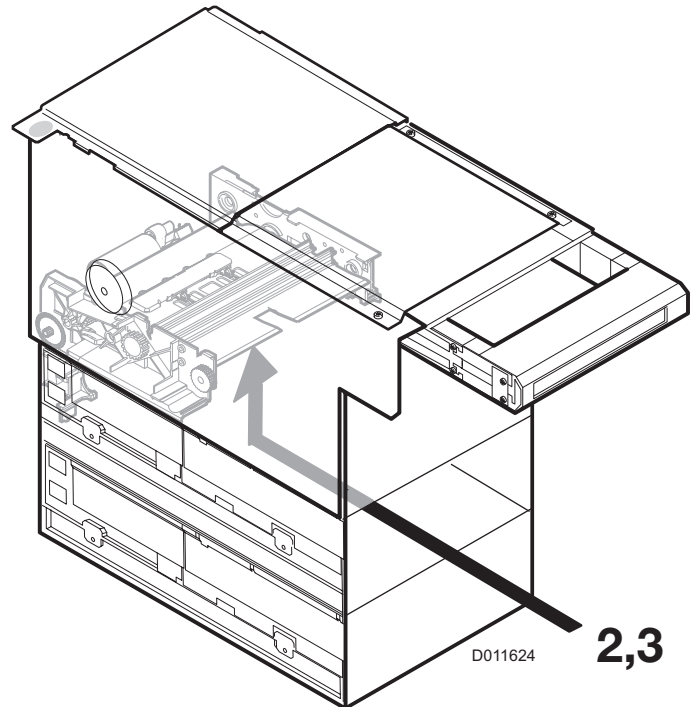
- 2 Release the yellow handle inside the upper most note cassette compartment by pushing it inwards and pulling down.

- 3 Fold the Note Qualifier lid down by pulling the yellow handle.

- 4 Remove all jammed notes.

- 5 Any notes removed from the mechanism must be handled according to local procedures.

- 6 Make sure to close the Note Qualifier lid properly and fasten the yellow handle.  
If the yellow handle can be released only by pulling downwards, it has not been properly fastened.



**If the trouble still remains, call for an NMD service engineer.**

# troubleshooting

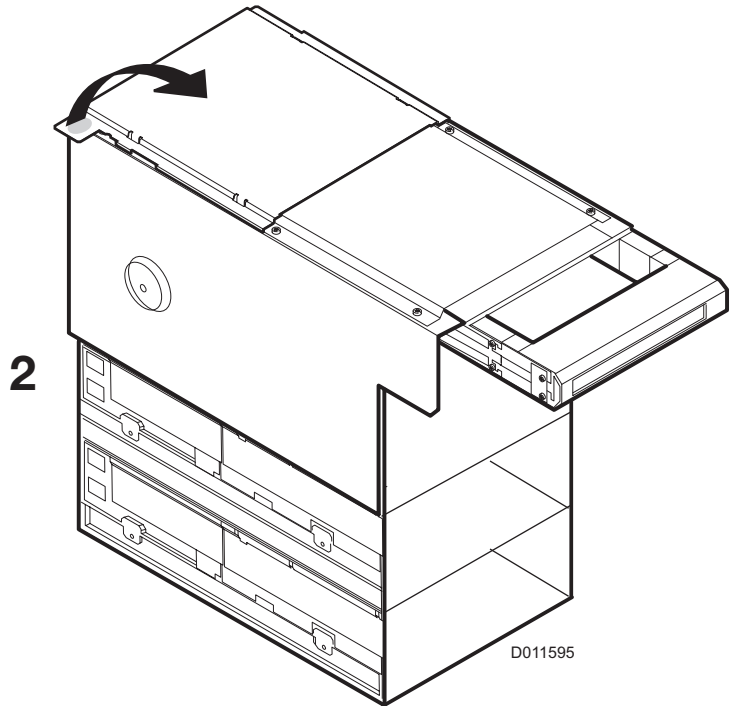
## jam in Note Diverter

- 1 Remove Note Cassettes and Reject Vault.

### Important!

Always switch the **power off** before clearing jams.

- 2 Open the top lid of the NMD.

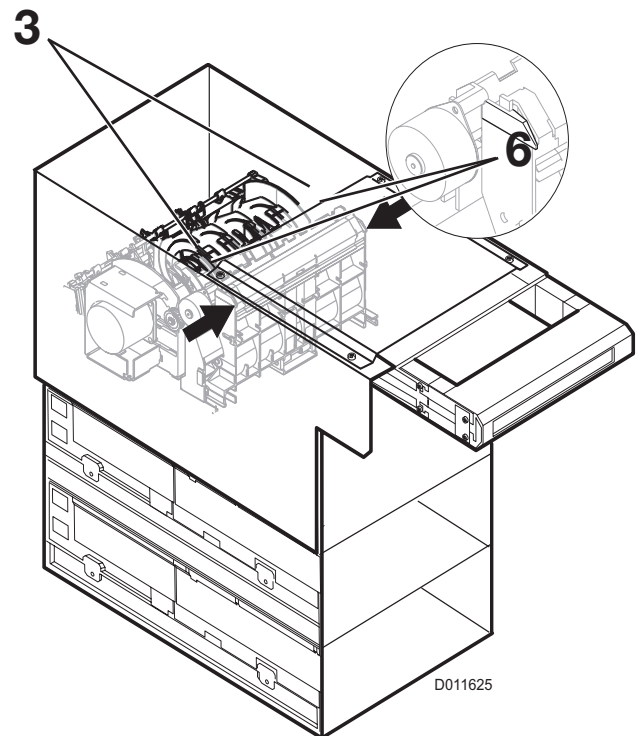


- 3 Open the Note Diverter lid by releasing the snap fits and folding the lid.

- 4 Remove all jammed notes.

- 5 Any notes removed from the mechanism must be handled according to local procedures.

- 6 Close the note diverter lid by pressing the outer ends of the lid. Be careful not to damage the snap fits.



**If the trouble still remains, call for an NMD service engineer.**

**removing Note Cassettes and Reject Vault**

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## The Talaris Commitment

Talaris are World Experts in cash management. Across the globe 2,300 personnel, with over 130 business partners deliver technology and solutions that provide security, productivity and innovation to our customers.

The company is committed to the highest ethical standards and compliance with legislation and to be a fair employer wherever we operate. As a responsible organisation we maintain a disciplined approach to our corporate governance and operate to the optimum professional standards in all aspects of our business.

Talaris will always seek to provide a safe and productive work environment where all employees can grow and be challenged. Wherever we operate our objective is to contribute actively to the community and the local environment. An intrinsic part of our business philosophy across our product and service offerings is to be consistently environmentally responsible and to continue to improve our performance across all environmental issues wherever possible.



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